



# UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE  
United States Patent and Trademark Office  
Address: COMMISSIONER FOR PATENTS  
P.O. Box 1450  
Alexandria, Virginia 22313-1450  
www.uspto.gov

| APPLICATION NO. | FILING DATE | FIRST NAMED INVENTOR | ATTORNEY DOCKET NO. | CONFIRMATION NO. |
|-----------------|-------------|----------------------|---------------------|------------------|
| 10/684,410      | 10/15/2003  | Shunpei Yamazaki     | 0756-7211           | 7762             |

31780 7590 11/24/2004

ERIC ROBINSON

PMB 955

21010 SOUTHBANK ST.

POTOMAC FALLS, VA 20165

EXAMINER

KOSLOW, CAROL M

ART UNIT

PAPER NUMBER

1755

DATE MAILED: 11/24/2004

Please find below and/or attached an Office communication concerning this application or proceeding.

|                              |                               |   |  |
|------------------------------|-------------------------------|---|--|
| <b>Office Action Summary</b> | Application No.<br>10/684,410 | Applicant(s) <span style="float: right;">C 26</span><br>YAMAZAKI ET AL. |  |
|                              | Examiner<br>C. Melissa Koslow | Art Unit<br>1755  |  |

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --  
**Period for Reply**

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

**Status**

- 1) ☒ Responsive to communication(s) filed on 07 September 2004.  
 2a) ☒ This action is **FINAL**.                      2b) ☐ This action is non-final.  
 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

**Disposition of Claims**

- 4) ☒ Claim(s) 1-18 is/are pending in the application.  
     4a) Of the above claim(s) 5-18 is/are withdrawn from consideration.  
 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.  
 6) ☒ Claim(s) 1-4 is/are rejected.  
 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.  
 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

**Application Papers**

- 9) ☐ The specification is objected to by the Examiner.  
 10) ☒ The drawing(s) filed on 9/7/04+10/15/03 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.  
     Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
     Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).  
 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

**Priority under 35 U.S.C. § 119**

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).  
     a) ☐ All    b) ☐ Some \*    c) ☐ None of:  
         1. ☐ Certified copies of the priority documents have been received.  
         2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.  
         3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

**Attachment(s)**

- |   |   |
|---|---|
| 1) <input type="checkbox"/> Notice of References Cited (PTO-892)  | 4) <input type="checkbox"/> Interview Summary (PTO-413)<br>Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948)  | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152)             |
| 3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)<br>Paper No(s)/Mail Date <u>9/7/04</u> | 6) <input type="checkbox"/> Other: _____  |

This action is in response to applicants' amendment of 7 September 2004. The amendment to the claims has overcome the 35 USC 112 rejection. The amendments to the figure and the specification have overcome the objections to the drawings. The new title is acceptable and has been entered. Applicant has complied with one or more conditions for receiving the benefit of an earlier filing date under 35 U.S.C. 120 because the application data sheet contains a specific reference to the prior application. Applicant's arguments with respect to the remaining rejections have been fully considered but they are not persuasive.

Newly submitted claims 5-18 are directed to an invention that is independent or distinct from the invention originally claimed for the following reasons: Claims 5-12 are directed to a method of making an EL device and claims 14-18 are directed to a portable information terminal. The examined claims were directed to a digital camera and the method for making the camera. The newly submitted claims are unrelated to the examined claims since they are not disclosed as capable of use together and they have different modes of operation, different functions, and different effects (MPEP § 806.04, MPEP § 808.01).

Since applicant has received an action on the merits for the originally presented invention, this invention has been constructively elected by original presentation for prosecution on the merits. Accordingly, claims 5-18 are withdrawn from consideration as being directed to a non-elected invention. See 37 CFR 1.142(b) and MPEP § 821.03.

This application contains claims 5-18 drawn to a non-elected invention. A complete reply to the final rejection must include cancellation of nonelected claims or other appropriate action (37 CFR 1.144) See MPEP § 821.01.

The nonstatutory double patenting rejection is based on a judicially created doctrine grounded in public policy (a policy reflected in the statute) so as to prevent the unjustified or

Art Unit: 1755

improper timewise extension of the "right to exclude" granted by a patent and to prevent possible harassment by multiple assignees. See *In re Goodman*, 11 F.3d 1046, 29 USPQ2d 2010 (Fed. Cir. 1993); *In re Longi*, 759 F.2d 887, 225 USPQ 645 (Fed. Cir. 1985); *In re Van Ornum*, 686 F.2d 937, 214 USPQ 761 (CCPA 1982); *In re Vogel*, 422 F.2d 438, 164 USPQ 619 (CCPA 1970); and, *In re Thorington*, 418 F.2d 528, 163 USPQ 644 (CCPA 1969).

A timely filed terminal disclaimer in compliance with 37 CFR 1.321(c) may be used to overcome an actual or provisional rejection based on a nonstatutory double patenting ground provided the conflicting application or patent is shown to be commonly owned with this application. See 37 CFR 1.130(b).

Effective January 1, 1994, a registered attorney or agent of record may sign a terminal disclaimer. A terminal disclaimer signed by the assignee must fully comply with 37 CFR 3.73(b).

Claims 1-4 are rejected under the judicially created doctrine of obviousness-type double patenting as being unpatentable over claims 1-9 and 11-19 of U.S. Patent No. 6,641,933 in view of U.S. patents 6,300,612 and 6,661,454.

Claims 3, 6, 9, 13, 16 and 19 of Patent No. 6,641,933 teaches electronic apparatus that contain a EL display device, wherein the display device comprises pixels provided with a light-emitting element which comprises a thin film including a light-emitting organic compound and that an ionic impurity concentration of at most 0.1 ppm or at most 0.01 ppm. Claims 2, 5, 8, 12, 15 and 18 define the ionic impurities as being sodium or potassium. The apparatus is not defined in the claims, but applicants define the apparatus in column 20, line 66 through column 21, line 65. This list includes digital camera. U.S. patents 6,300,612 and 6,661,454 also teach digital cameras conventionally contain a EL display device, wherein the display device comprises pixels provided with a light-emitting element which comprises a thin film including a light-emitting organic compound. Therefore it would have been obvious to select a digital camera as the apparatus discussed in the claims of Patent No. 6,641,933.

Applicant's arguments fail to comply with 37 CFR 1.111(b) because they amount to a general allegation that the claims define a patentable invention without specifically pointing out how the language of the claims patentably distinguishes them from the references.

The text of those sections of Title 35, U.S. Code not included in this action can be found in a prior Office action.

Claims 1-4 are rejected under 35 U.S.C. 103(a) as being unpatentable over U.S. patents 6,300,612 and 6,661,454 in view of U.S. patent 6,617,051.

U.S. patents 6,300,612 and 6,661,454 teach digital cameras conventionally contain a EL display device, wherein the display device comprises pixels provided with a light-emitting element which comprises a thin film including a light-emitting organic compound. They do not teach the purity of the thin film including a light-emitting organic compound. U.S. patent 6,617,051 teaches EL devices where the thin film including a light-emitting organic compound has an impurity concentration of less than 1000 ppm. This teaching implies that the total impurity content is less than 1000 ppm, which means the ionic impurity content falls within the taught range. Thus the taught ionic impurity content overlaps the claimed range. Product claims with numerical ranges which overlap prior art ranges were held to have been obvious under 35 USC 103. *In re Wertheim* 191 USPQ 90 (CCPA 1976); *In re Malagari* 182 USPQ 549 (CCPA 1974); *In re Fields* 134 USPQ 242 (CCPA 1962); *In re Nehrenberg* 126 USPQ 383 (CCPA 1960). U.S patent 6,617,051 teaches the films having the taught impurity concentration have a longer emission life and an improved emission luminescence. Accordingly, one of ordinary skill in the art would have found it obvious to use the EL displays discussed in U.S. patent 6,617,051, which having a longer emission life and an improved emission luminescence, than those not

having the that impurity concentration, as the displays in the cameras of U.S. patents 6,300,612 and 6,661,454. The reference suggests the claimed cameras.

While the reference does not measure the amount of ionic impurities, the statement “having an impurity concentration of lower than 1000 ppm” suggests to one of ordinary skill in the art that the total impurity concentration should be less than 1000 ppm. It is noted that the Zou et al article, cited in the previous action, shows that it was known in the art as of 1997 that the ionic impurity content should be minimized due to the argued adverse affect of these ion. Since the article by Zou et al article teaches to remove ionic impurities for the same as applicants, then there is no unexpected results from the claimed ionic impurity content. The rejection is maintained.

In the previous office action, the Examiner requested applicants provide some information as to standard, conventional or acceptable amount of ionic impurities in the light-emitting compounds used in EL displays. Applicants did not acknowledge this request in their response.

**Accordingly, applicants are required under 37 CFR 1.105 to provide the following information that the examiner has determined is reasonably necessary to the examination of this application.**

37 CFR § 1.105 Requirements for information.

(a)(1) In the course of examining or treating a matter in a pending or abandoned application filed under 35 U.S.C. 111 or 371 (including a reissue application), in a patent, or in a reexamination proceeding, the examiner or other Office employee may require the submission, from individuals identified under § 1.56(c), or any assignee, of such information as may be reasonably necessary to properly examine or treat the matter, for example:

(v) *Information used in invention process*: A copy of any non-patent literature, published application, or patent (U.S. or foreign) that was used in the invention process, such as by designing around or providing a solution to accomplish an invention result.

(viii) *Technical information known to applicant*. Technical information known to applicant concerning the related art, the disclosure, the claimed subject matter, other factual information pertinent to patentability, or concerning the accuracy of the examiner's stated interpretation of such items.

In response to this requirement, please provide the title, citation and copy of each publication that any of the applicants relied upon to develop the disclosed subject matter that describes the applicant's invention, particularly as to developing the claimed amount of ionic impurity in the light-emitting compounds used in EL displays {37 CFR 1.105(a)(1)(v)}, and information known to applicant as to the standard, conventional or acceptable amount of ionic impurities in the light-emitting compounds used in EL displays at the time of invention {37 CFR 1.105(a)(1)(viii)}.

For each publication, please provide a concise explanation of the reliance placed on that publication in the development of the disclosed subject matter.

The article by Zou et al indicates it is known to use highly pure light emitting compounds in EL devices to minimize the amount of ionic impurity in these compounds, but the amount present is not discussed. The requested information will allow for a proper comparison between the prior art and the claimed invention.

In responding to those requirements that require copies of documents, where the document is a bound text or a single article over 50 pages, the requirement may be met by providing copies of those pages that provide the particular subject matter indicated in the requirement, or where such subject matter is not indicated, the subject matter found in applicant's disclosure.

The fee and certification requirements of 37 CFR 1.97 are waived for those documents submitted in reply to this requirement. This waiver extends only to those documents within the scope of this requirement under 37 CFR 1.105 that are included in the applicant's first complete communication responding to this requirement. Any supplemental replies subsequent to the first communication responding to this requirement and any information disclosures beyond the scope of this requirement under 37 CFR 1.105 are subject to the fee and certification requirements of 37 CFR 1.97.

*If the supplied information results in a new grounds of rejection, then the finality of the office will be withdrawn.*

This Office action has an attached requirement for information under 37 CFR 1.105. A complete reply to this Office action must include a complete reply to the attached requirement for information. The time period for reply to the attached requirement coincides with the time period for reply to this Office action.

**THIS ACTION IS MADE FINAL.** Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire **THREE MONTHS** from the mailing date of this action. In the event a first reply is filed within **TWO MONTHS** of the mailing date of this final action and the advisory action is not mailed until after the end of the **THREE-MONTH** shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event,



Art Unit: 1755

however, will the statutory period for reply expire later than SIX MONTHS from the mailing date of this final action.


Any inquiry concerning this communication or earlier communications from the examiner should be directed to Melissa Koslow whose telephone number is (571) 272-1371. The examiner can normally be reached on Monday-Friday from 8:00 AM to 3:30 PM.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Mark Bell, can be reached at (571) 272-1362.

The fax number for all official communications is (703) 872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

cmk  
November 18, 2004

  
C. Melissa Koslow  
Primary Examiner  
Tech. Center 1700



MICHAEL W. BALL  
DIRECTOR  
TECHNOLOGY CENTER 1700